

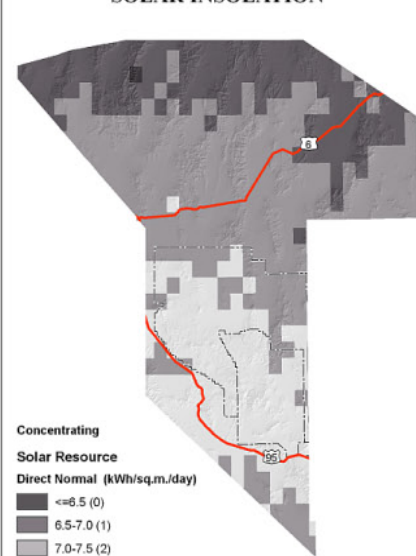
SOLAR SUITABILITY MODEL

SOLAR SUITABILITY = PRIMARY SOLAR SUITABILITY X SECONDARY SOLAR SUITABILITY

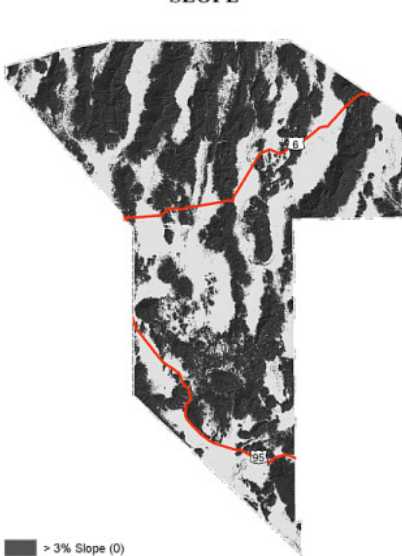
PRIMARY SOLAR SUITABILITY VARIABLES

These primary variables are those used in the Western Governor's Association (WGA) Western Renewable Energy Zone Initiative, Phase 1. This model provides more slope and land exclusion detail than that used by the WGA, but excludes the potential megawatt determination. Each map shows the variable, the thematic breakpoints, and the score used in parentheses. Any low solar insolation, high slope, or excluded lands results in land that is excluded from consideration.

SOLAR INSOLATION



SLOPE



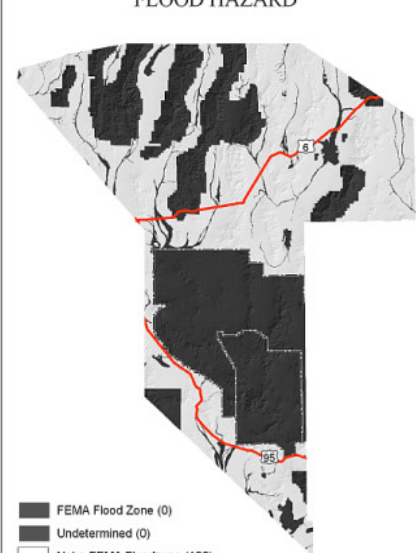
LAND EXCLUSION



SECONDARY SOLAR SUITABILITY VARIABLES

These following secondary variables extend beyond the Western Governor's model, and are additive with each other. The maximum total score possible is 1200. Each map shows the variable, the thematic breakpoints, and the score used in parentheses.

FLOOD HAZARD



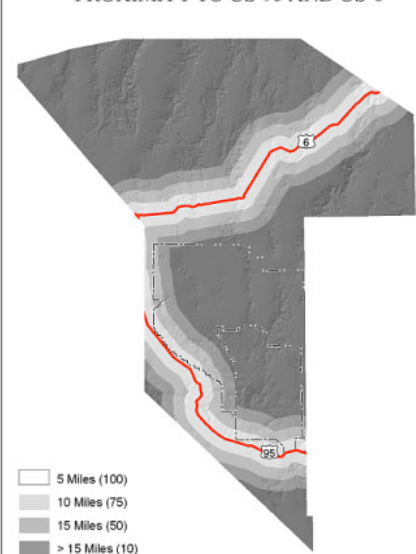
SEISMIC HAZARD



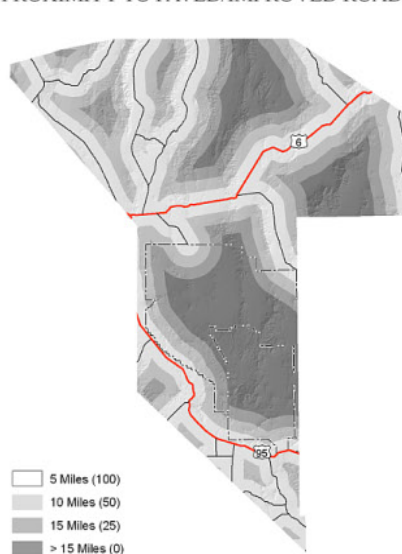
WESTERN GOVERNOR'S ASSOC. QUALIFIED RESOURCE AREA



PROXIMITY TO US-95 AND US-6



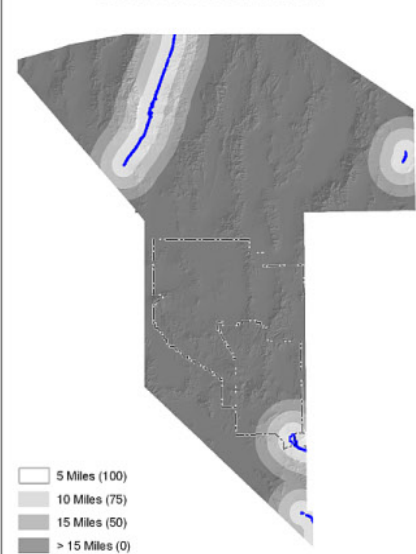
PROXIMITY TO PAVED IMPROVED ROADS



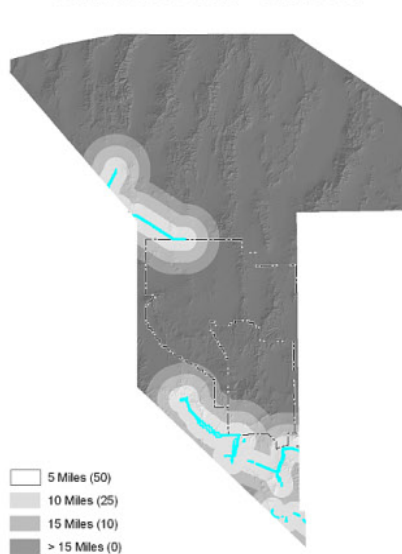
PROXIMITY TO SECTION 368 POWERLINE



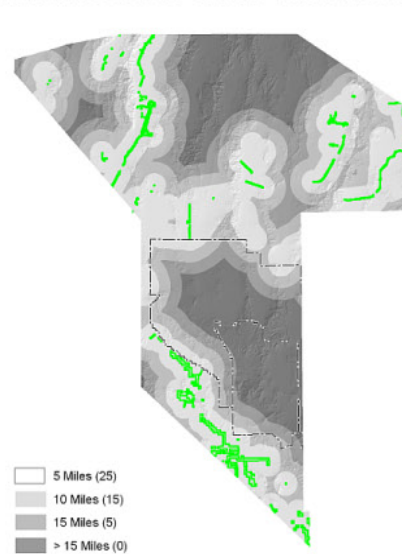
PROXIMITY TO 230 KV



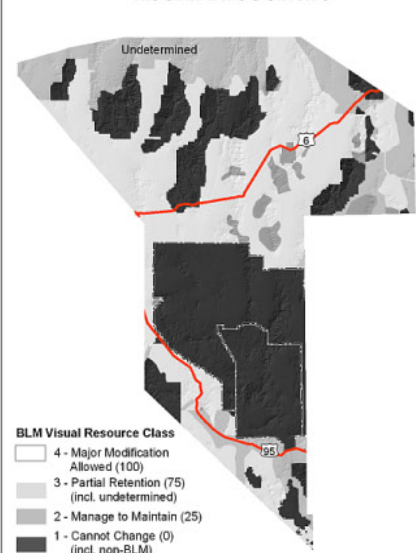
PROXIMITY TO 120 - 138/230 KV



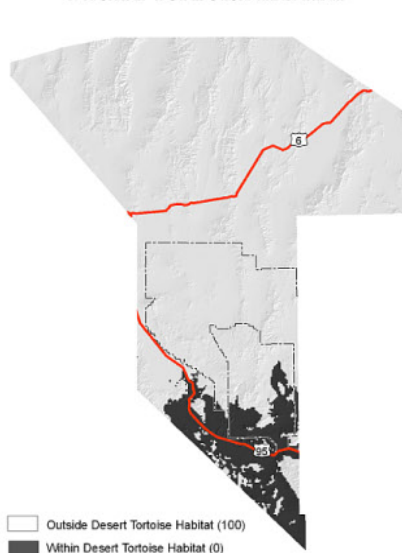
PROXIMITY TO 12 - 69 AND UNKNOWN KV



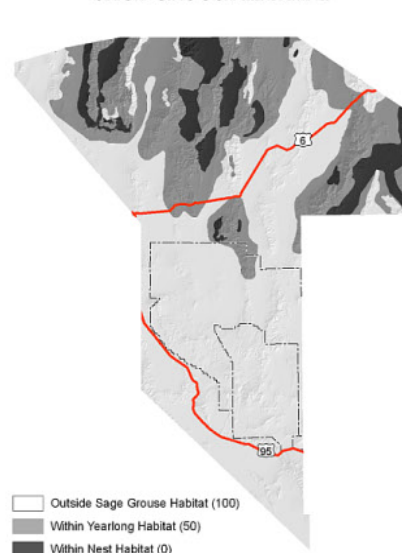
VISUAL RESOURCES



DESERT TORTOISE HABITAT

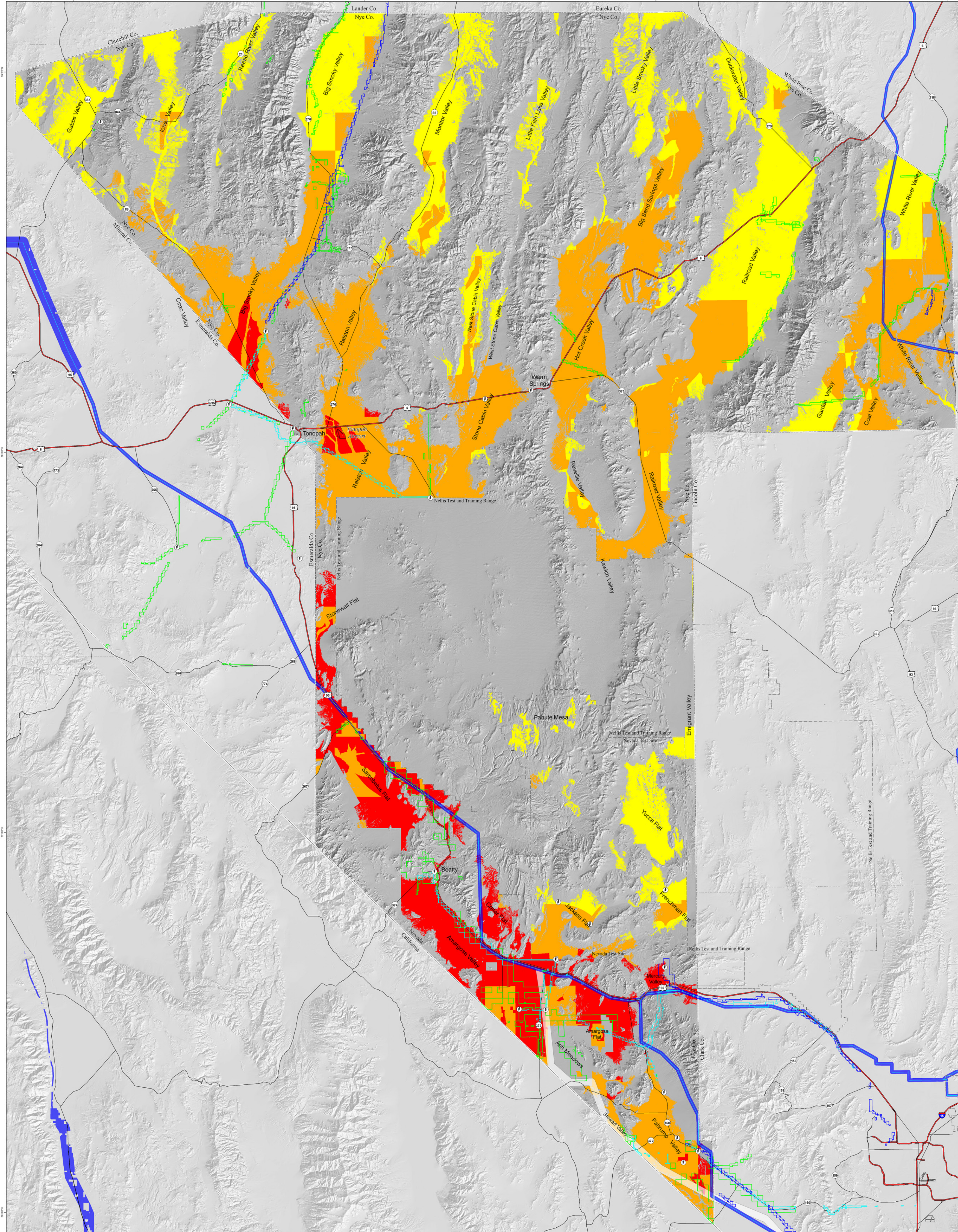


SAGE GROUSE HABITAT

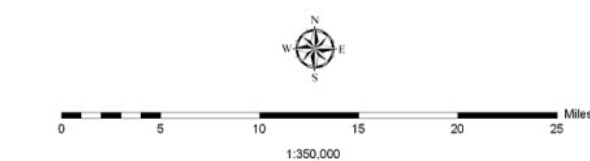


SOLAR SUITABILITY RANKING

Final scores were ranked into three categories: Best - 1725-3120 (red), Better - 1060-1725 (orange), Good - less than 1060 (yellow), and Unsuitable - zero (no color). The three mapped ranks were used to classify Nye County. Where the areal extent of a mapped rank was smaller than 300 acres, the area was merged into nearby larger ranked areas based upon a neighborhood analysis.



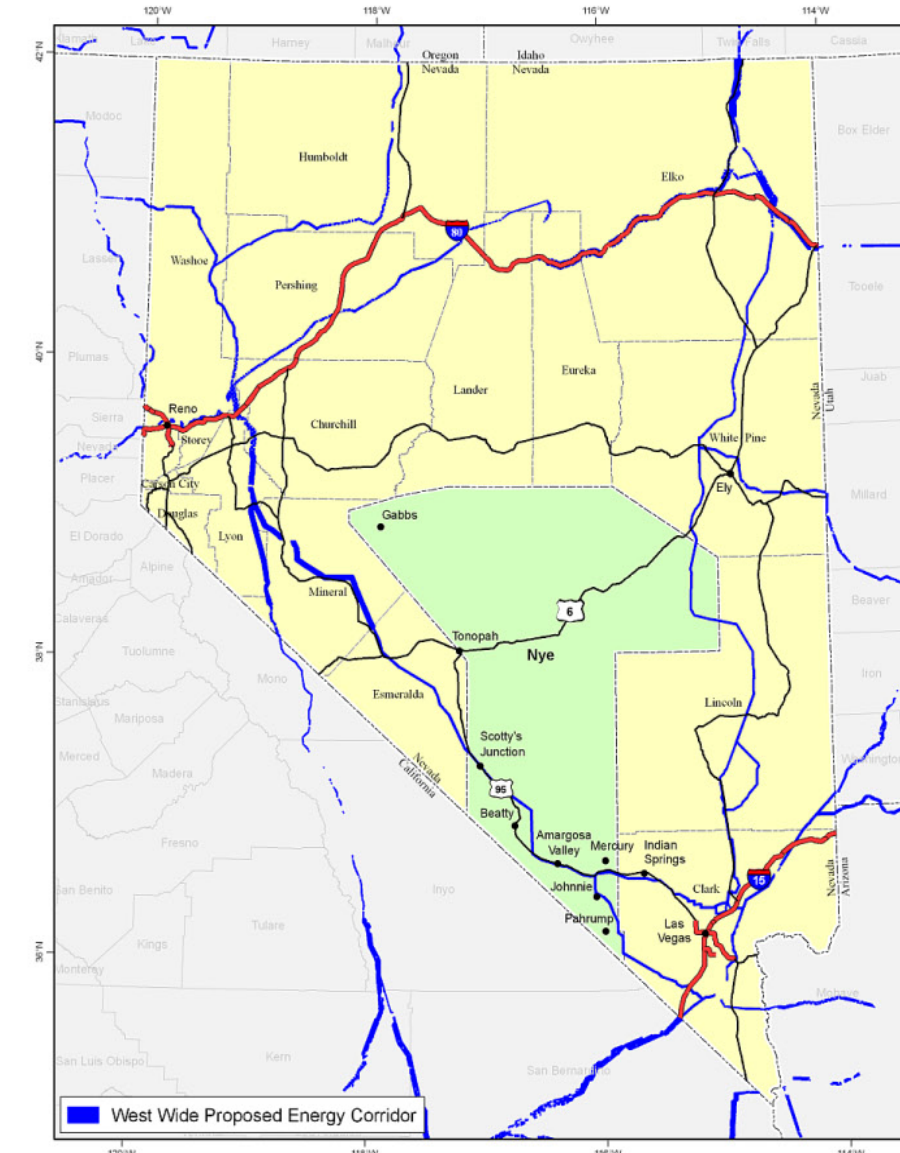
SUITABILITY FOR SOLAR GENERATION, TRANSMISSION, AND RELATED SUPPORT FACILITIES NYE COUNTY, NEVADA



Solar Suitability Rank

Best Score	1725-3120
Better Score	1060-1725
Good Score	1-1060
Unsuitable	0

- Power Substations
- 230 kV Powerline Right of Way
- 120-138/230 kV Powerline Right of Way
- 12-69 kV Powerline Right of Way
- West Wide Proposed Energy Corridor (Blue) with Section 368 Centerline (Light Blue)
- BLM Las Vegas RMP Proposed Utility Corridor
- Primary Road
- Secondary and Other Roads
- Tonopah Airport



DATA SOURCES

- Solar Insolation**: SUNY Albany and National Renewable Energy Laboratory (NREL) (2001)
- Slope**: US Geological Survey National Elevation Data (10m) from National Resource Conservation Service (2/11/2010)
- Land Exclusion**: Nevada Bureau of Land Management (Nevada Landowner, 2007) and US Forest Service Humboldt-Toiyabe National Forest (Roadless Areas, 2001)
- Flood Hazard**: Federal Emergency Management Administration (FEMA, 2009) and Clark County GIS Management Office, (2002)
- Seismic Hazard**: US Geological Survey and Nevada Bureau of Mines and Geology, Quaternary Fault and Fold Database of the United States (2008)
- Qualified Resource Area**: Western Governors Association, Western Renewable Energy Zones, Phase 1, (Black & Veatch Corporation for NREL, 2009)
- Roads**: US Census Bureau, TIGER 2009
- West Wide Proposed Energy Corridor with Section 368 Centerline**: Argonne National Laboratory (2008)
- BLM Las Vegas RMP Proposed Utility Corridor**: BLM Las Vegas Resource Management Plan (RMP) Proposed Utility Corridor (1996), provided by BLC
- Transmission Rights-of-Way (ROW)**: BLM Geocommunicator (3/17/2010) and LR2000 (3/18-22/2010)
- Visual Resources**: Las Vegas RMP, 1998; Tonopah RMP, 1997; Ely RMP, 2008; Shoshone-Eureka RMP, 1986)
- Desert Tortoise Habitat**: US Geological Survey, Open-File Report 2009-1102 (2009)
- Sage Grouse Habitat**: Sage Grouse Nesting and Early Brood Habitat (Nevada Division of Wildlife and Bureau of Land Management, 2001) and Sage Grouse Distribution Yearling Use Distribution 2001 (Nevada Division of Wildlife, 2001)
- Tonopah Airport**: GDT and ESRL 2002



Produced By: TerraSpectra Geomatics
Date Produced: March 31, 2010
Grid Units: UTM, Zone 11, Meters
Projection: Transverse Mercator
Datum/Spheroid: NAD83/GRS80

